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Listing of Claims

1. (Previously Presented) A method for production of curved thread-reinforced tubular structures composed of rubber layers and of strengthening layers, comprising the steps of:

applying a first rubber layer to a circumference of an essentially cylindrical mandrel driven forward in a feed direction (X) coinciding with the cylinder axis of the mandrel;

winding on a multiplicity of parallel reinforcing threads, having defined thread angles (α) with respect to the feed direction, by means of a bobbin creel, to form a first thread ply, the mandrel being led through a rotating deflection element having ~~and~~ an inner circumference with a diameter greater than the diameter of the mandrel, the inner circumference surrounding the mandrel and guiding the reinforcing threads which are distributed along the inner circumference;

applying a covering rubber layer, wherein

the mandrel is led through the deflection element of the bobbin creel and the cylinder axis of the mandrel is offset with respect to the axis of rotation of the deflection element, the axis of rotation and the cylinder axis being parallel to each other.

2. (Previously Presented) The method as claimed in claim 1, further comprising a preceding step of displacing a guide of the mandrel transversally to the feed direction (X) to a position in which the cylinder axis of the mandrel is shifted with respect to the axis of rotation of the deflection element.

3. (Previously Presented) The method as claimed in claim 1, further comprising a

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preceding step of displacing the deflection element, together with the bobbin creel, transversely to the feed direction (X) to a position in which the axis of rotation of the deflection element is shifted with respect to the cylinder axis of the mandrel.

4. (Previously Presented )The method as claimed in claim 1, wherein the applying the covering of the rubber layer is provided after multiple execution of at least one of the applying a first rubber layer and the winding steps.

5. -8. (Canceled)

9. (Currently Amended) A method for production of curved thread-reinforced tubular structures, comprising the steps of:

leading at least one essentially cylindrical mandrel through a deflection element of a bobbin creel in a feed direction coinciding with the cylinder axis of the at least one mandrel, the deflection element having an inner circumference with a center axis offset from the cylinder axis of the at least one mandrel ; and

winding a multiplicity of parallel reinforcing threads on the at least one mandrel as the mandrel is led through the deflection element resulting in defined thread angles (α) with respect to the feed direction to form a tubular structure having a curvature, wherein:

a smaller gap between the outer circumference of the at least one mandrel and the inner circumference of the deflection element results in smaller thread angles $\alpha_1$;

a larger gap between the outer circumference of the at least one mandrel and the inner circumference of the deflection element results in larger thread angles $\alpha_2$; and

a small radius of the curvature is obtained in a region of the smaller thread angles $\alpha_1$ and a large radius of the curvature is obtained in a region of the larger thread angles $\alpha_2$.

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10. (Previously Presented) The method as claimed in claim 9, further comprising the steps of:

applying a rubber layer to a circumference of the at least one mandrel driven forward in the feed direction (X); and

applying a covering rubber layer to the rubber layer.

11. (Canceled)

12. (Previously Presented) The method as claimed in claim 9, wherein the thread angles correspond directly to a distance of the inner circumference of the deflection element from the at least one mandrel so that when the at least one mandrel is led through the deflection element different thread angles are produced over a circumference of the at least one mandrel.

13. (Original) The method as claimed in claim 9, wherein the winding on a multiplicity of parallel reinforcing threads forms a tubular structure which automatically undergoes a curvature after the multiplicity of parallel reinforcing threads are drawn off from the at least one mandrel.

14. (Original) The method as claimed in claim 13, further comprising vulcanizing the multiplicity of parallel reinforcing after it is drawn from the at least one mandrel.

15. (Previously Presented) The method as claimed in claim 9, further comprising varying the offset of the cylinder axis with respect to the center axis at selected portions to define curvatures of a resultant tubular structure.

16. (Previously Presented) The method as claimed in claim 15, further comprising varying the position of the cylinder axis of the at least one mandrel at selected portions to be concentric with the center axis of the inner circumference of the deflection

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element.

17. (Previously Presented) The method as claimed in claim 9, wherein the offset of the center axis from the cylinder axis is provided by at least one of:
displacing guides of the at least one mandrel transversally to the feed direction to a position where the cylinder axis of the at least one mandrel is shifted with respect to center axis of the inner circumference of the deflection element; and

displacing the deflection element, together with the bobbin creel, transversely to the feed direction to a position where the center axis is shifted with respect to the cylinder axis of the at least one mandrel .

18. (Previously Presented) The method as claimed in claim 9, wherein the at least one mandrel is advanced in a continuous process in a feed direction (X) through successively arranged extrusion devices.

19. (Previously Presented) The method as claimed in claim 9, wherein the thread angles are dependent on a feed speed of the at least one mandrel and a gap between the inner circumference of the deflection element and an adjacent outer circumference of the at least one mandrel.

20. (Canceled)